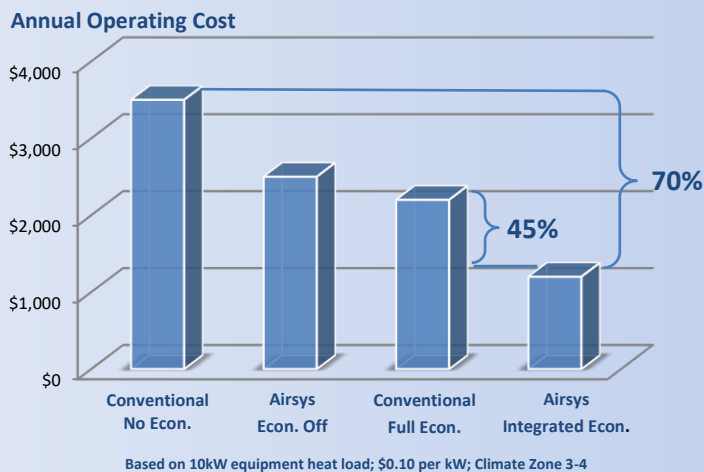


AIRSYS Wall Packaged Units

Equipment Cooling Solution with Integrated Free Cooling, 3kW - 18kW



- Highest efficiency packaged wall mount units with state of the art mechanical components
- Designed with an integrated economizer featuring seamless changeover and optional partial free cooling
- Design incorporates over twenty years of engineering experience providing data center cooling and medical chiller solutions

Highest Efficiency for Equipment Rooms

- Integrated variable capacity economizer system with an EER (btu/kW) as high as 200
- Designed specifically for computer/equipment environments; cooling capacity heavily shifted toward sensible heat removal
- Top exhaust design allows for more efficient heat removal while maintaining constant room temperature, significantly increasing the efficiency of both DX and Free Cooling



Feature Highlights

Wrap-around Condenser Coil

Aluminum finned copper coil with wrap-around design allows maximum surface heat exchange. 10 fin per inch spacing minimizes collection of dirt and debris.

Integrated Free Cooling Economizer

Standard on all units, the highly configurable economizer features seamless transitions and a variable capacity up to 100% rated supply fan air volume.

Robust Short Cycle Detection

Built-in protection circuit protects the compressor from brownouts and power transfers as short as 0.08s.

EC Supply Fan

Quieter, more efficient variable speed EC fans are standard on all models providing a highly favorable energy efficiency curve when compared to conventional AC fans.

Dual Layer Exterior Protection

Galvanized steel exterior coated with an additional layer of thermoset polymer provides two layers of protection against corrosion.

Extreme Temperature Range

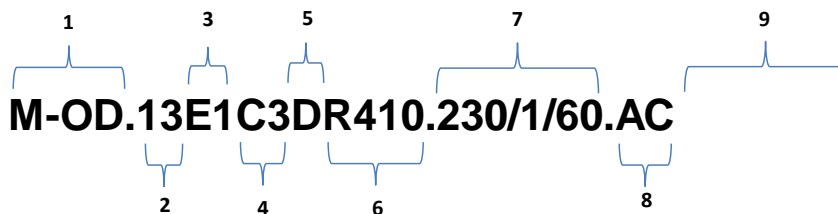
Designed for operation between -30°F and 127°F ambient temperature.

Top Exhaust / Bottom Throw Design

Taking advantage of simple physics (hot air rises), the top exhaust, bottom throw design increases the temperature difference across the heat exchanger and increases overall system efficiency by as much as 15% when compared to bottom exhaust systems.



MODEL NUMBER NOMENCLATURE



1	M-OD	Product series name: M-OD = MOBILECOOL-OUTDOOR: Packaged air conditioner with fresh air free cooling.
2	13	Unit nominal total cooling capacity in kW
3	E1	Compressor type & qty: E1 = Hermetic scroll compressor qty 1; R1= Rotary compressor qty 1
4	C3	Cabinet size code: There are 4 cabinet sizes: C1, C2, C3& C4.
5	D	Control configuration: D = Unit is designed to operate in a Dual control environment (aka Lead/Lag operation)
6	R410	Refrigerant: R410 = R410a.
7	230/1/60	AC Power source: 230/1/60 = 208/230V Single Phase 60Hz AC Power Source
8	AC	Supply Fan configuration: DC = DC EC fan; AC = AC EC fan. (EC = Electronically commutated variable speed fan)
9		Special code: Utilized to designate unit customization (non-standard configuration)

COOLING CAPACITY

Model	Cooling Mode	Outdoor Temp	Full Compressor (1) (2)			Free Cooling (2)		Free Cooling (2) (3)	
			95 °F			70 °F		<50°F	
	Nominal Tonnage	Total Capacity Btu (kW)	Sensible Capacity Btu (kW)	EER	Sensible Capacity Btu (kW)	EER	Sensible Capacity Btu (kW)	EER	
AC Supply Fan									
M-OD	3R1C1DR410.230/1/60.AC	1	12200 (3.6)	10500 (3.1)	10.1	12600 (3.7)	70.0	10500 (3.1)	375
	5R1C1DR410.230/1/60.AC	1.5	18000 (5.3)	15600 (4.6)	10.0	14700 (4.3)	43.2	15600 (4.6)	216
	7E1C2DR410.230/1/60.AC	2	27600 (8.1)	24200 (7.1)	11.5	26200 (7.6)	29.1	24200 (7.1)	182
	9E1C2DR410.230/1/60.AC	2.5	33600 (9.8)	29600 (8.7)	11.0	30400 (8.9)	33.8	29600 (8.7)	199
	13E1C3DR410.230/1/60.AC	3.5	46000 (13.5)	40900 (12.0)	10.0	32500 (9.6)	36.1	40900 (12.0)	151
	18E1C4DR410.230/1/60.AC	5	61000 (17.9)	56200 (16.5)	10.0	48200 (14.1)	26.8	56200 (16.5)	125
	18E1C4DR410.230/3/60.AC	5	60000 (17.6)	52600 (15.4)	10.0	48200 (14.1)	26.8	52600 (15.4)	127
	18E1C4DR410.460/3/60.AC	5	61000 (17.9)	53200 (15.6)	10.0	48200 (14.1)	26.8	53200 (15.6)	127
DC Supply Fan									
M-OD	9E1C2DR410.230/1/60.DC	2.5	31000 (9.1)	27200 (8.0)	11.0	24500 (7.2)	51.0	27200 (8.0)	243
	13E1C3DR410.230/1/60.DC	3.5	46000 (13.5)	39500 (11.6)	10.1	36300 (10.6)	37.8	39500 (11.6)	190
	13E1C3DR410.230/3/60.DC	3.5	47500 (13.9)	39200 (11.5)	10.0	36700 (10.8)	38.2	39200 (11.5)	193

(1) Total Capacity and EER rated according to AHRI Standard 390
 (2) All data based on 80 °F return temperature. Free Cooling Capacity based on Lead/Lag Configuration
 (3) Free Cooling Capacity reduced to match 100% DX Capacity

TECHNICAL DATA

Model	Compressor	Evaporator Fan		Condenser Fan		Electric Heater (1)		Refrigerant	Noise (2)		
	Current (A)	Current (A)	CFM (3)	Current (A)	CFM	kW Def/(Opt'l)	Current (A)	lbs.	Indoor (dBA)	Outdoor (dBA)	
AC Supply Fan											
M-OD	3R1C1DR410.230/1/60.AC	4.2	0.8	600	1.2	2050	1.5 / (2.4)	6.5/10.4	3.3	50	60
	5R1C1DR410.230/1/60.AC	6.7	1.1	700	1.2	2050	1.5 / (2.4)	6.5/10.4	4.2	50	60
	7E1C2DR410.230/1/60.AC	9.3	2.9	1050	1.2	2200	5 / (2.4)	21.7/10.4	6.2	50	60
	9E1C2DR410.230/1/60.AC	10.5	2.9	1250	2.7	3700	5 / (2.4)	21.7/10.4	6.8	56	61
	13E1C3DR410.230/1/60.AC	16.5	2.9	1550	2.7	3700	5	21.7	8.2	56	61
	18E1C4DR410.230/1/60.AC	21.3	5.8	2300	3.8	4500	5	21.7	11.0	55	60
	18E1C4DR410.230/3/60.AC	12.6	5.8	2300	3.8	4500	5	12.6	11.7	55	60
	18E1C4DR410.460/3/60.AC	6.3	5.8	2300	3.8	4500	5	6.3	14.5	55	60
DC Supply Fan											
M-OD	9E1C2DR410.230/1/60.DC	10.8	5.1	1170	2.7	3700	5 / (2.4)	21.7/10.4	6.8	56	61
	13E1C3DR410.230/1/60.DC	16.5	11.0	1730	2.7	3700	5	21.7	8.2	56	61
	13E1C3DR410.230/3/60.DC	11.0	11.0	1750	2.7	3700	5	12.6	8.2	56	61

(1) Optional
 (2) Ambient Temperature = 95°F, 6.5ft away from unit in open space
 (3) Measured with 2" pleated filter standard on all models

ELECTRICAL RATINGS

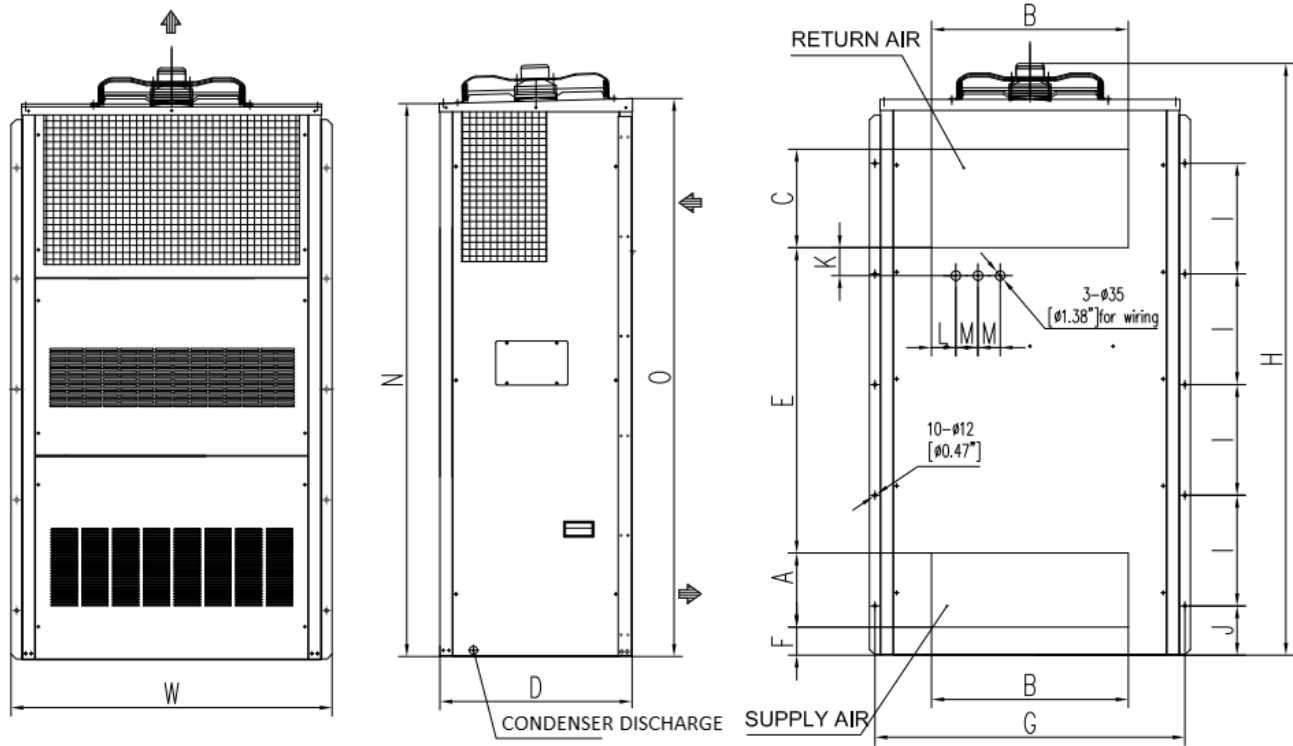
Model	ELECT. HEAT	1.5 KW				2.4kW				5 KW			
		AC		48VDC		AC		48VDC		AC		48VDC	
		MCA	MFS	MCA	MFS	MCA	MFS	MCA	MFS	MCA	MFS	MCA	MFS
AC Supply Fan													
M-OD	3R1C1DR410.230/1/60.AC	10	15	--	--	15	20	--	--	--	--	--	--
	5R1C1DR410.230/1/60.AC	11	15	--	--	15	20	--	--	--	--	--	--
	7E1C2DR410.230/1/60.AC	--	--	--	--	17	25	--	--	31	35	--	--
	9E1C2DR410.230/1/60.AC	--	--	--	--	--	--	--	--	31	35	--	--
	13E1C3DR410.230/1/60.AC	--	--	--	--	--	--	--	--	32	40	--	--
	18E1C4DR410.230/1/60.AC	--	--	--	--	--	--	--	--	37	55	--	--
	18E1C4DR410.230/3/60.AC	--	--	--	--	--	--	--	--	28	40	--	--
	18E1C4DR410.460/3/60.AC	--	--	--	--	--	--	--	--	18	25	--	--
DC Supply Fan													
M-OD	9E1C2DR410.230/1/60.DC	--	--	--	--	18	30	7	10	28	35	7	10
	13E1C3DR410.230/1/60.DC	--	--	--	--	--	--	--	--	28	40	14	20
	13E1C3DR410.230/3/60.DC	--	--	--	--	--	--	--	--	17	25	14	20

*MCA = Minimum Circuit Ampacity (Wire Size Amps) MFS = Maximum Fuse Size or HACR circuit breaker

FILTER SIZES

Cabinet Size	Filter Qty	Nominal Size (in)	Exact Size (in)
C1	1	16 x 16 x 2	15½ x 15½ x 1¾
C2	1	18 x 25 x 2	24½ x 17½ x 1¾
C3	2	16 x 16 x 2	15½ x 15½ x 1¾
C4	2	16 x 20 x 2	19½ x 15½ x 1¾

UNIT DIMENSIONS



Cabinet Size		C1		C2		C3		C4	
Unit of measurement		mm	in	mm	in	mm	in	mm	in
Width	W	700	27.6	1010	39.8	1160	45.7	1360	53.5
Depth	D	620	24.4	700	27.6	700	27.6	700	27.6
Height	H	1930	76.0	2130	83.9	2130	83.9	2130	83.9
Supply	A	200	7.9	268	10.6	268	10.6	268	10.6
	B	450	17.7	708	27.9	759	29.9	880	34.7
Return	C	300	11.8	356	14.0	356	14.0	356	14.0
	B	450	17.7	708	27.9	759	29.9	880	34.7
	E	1000	39.4	1104	43.5	1104	43.5	1104	43.5
	F	133	5.2	101	4.0	101	4.0	101	4.0
	G	660	26.0	970	38.2	1120	44.1	1320	52.0
	I	350	13.8	400	15.8	400	15.8	400	15.8
	J	226	8.9	178	7.0	178	7.0	178	7.0
	K	101	4.0	101	4.0	101	4.0	101	4.0
	L	87	3.4	87	3.4	112	4.4	112	4.4
	M	80	3.2	80	3.2	80	3.2	80	3.2
	N	1800	70.9	1999	78.7	1999	78.7	1999	78.7
	O	1815	71.5	2017	79.4	2017	79.4	2017	79.4

UNIT WEIGHT

Size	3R1C1	5R1C1	7E1C2	9E1C2	13E1C3. xx.AC	13E1C3. xx.DC	18E1C4
lbs.	355	370	515	530	616	635	712
kg	161	168	234	240	279	288	323